IN THE CLAIMS:

Please cancel claims 4 and 21 without prejudice or disclaimer, and amend claims 1-3, 5-20, and 22-52 as follows:

1. (Currently Amended) A centrifugal separator comprising:

a centrifugal rotor rotors(10-1. 10-2. 80-1. 80-2) with a symmetric rotation [[axes]]axis, having a single sample separation chamber disposed therein chambers (2, 15, 70), for centrifuging a sample[[s]] contained in a sample solution[[s]] placed in the sample separation chamber, and an upper opening[[s]] communicating with (3) passing through to said sample separation chambers in theat an upper part[[s]] of the centrifugal rotor, said rotation axis included inside said separation chamber;

<u>a</u> members of frameworks capable of being coupled to <u>selectively engaged with</u> said upper openings (100); and

rotation-driving means [[(20)]] for rotating said centrifugal rotor[[s]], assuming that the direction of said symmetric rotation axis is the first direction, by rotating by means of said members of frameworks around [[a]] said rotation axis in a [[said]] first direction,

wherein provided that two directions intersecting each of a second direction and a third direction intersects with said first direction at a right angle are the second direction and the third direction, respectively, the length a dimension of said sample separation chamber in said third direction is larger than the length a dimension of said sample separation chamber in said second direction.

- 2. (Currently Amended) A centrifugal separator according to claim 1, wherein said members of frameworks are is engaged with said upper opening[[s]] to seal said upper opening[[s]] with said member[[s]].
- 3. (Currently Amended) A centrifugal separator according to claim 1, wherein <u>said</u> sample solution[[s are]] <u>is</u> injected into said sample separation chamber[[s from]]<u>via</u> said upper opening[[s]].
- 4. (Cancelled)
- 5. (Currently Amended) A centrifugal separator according to claim 1, wherein a portion[[s,]]

to which the largest centrifugal acceleration generated by rotation of said centrifugal rotor[[s]] is applied[[,]] has the smallest <u>cross sectional</u> area[[s]].

- 6. (Currently Amended) A centrifugal separator according to claim 1, wherein <u>a</u> lower part[[s]] of said centrifugal rotor[[s have]] <u>has a</u> lower openings (16) <u>passing through to communicating with said sample separation chamber[[s]].</u>
- 7. (Currently Amended) A centrifugal separator according to claim 6, wherein the centrifugal rotors consist of includes the upper part members of frameworks (110-1) and the lower part members of frameworks (120-1), and the upper members and the lower parts members of frameworks are fitted to each other one another.
- 8. (Currently Amended) A centrifugal separator comprising:

<u>a</u> centrifugal <u>rotor</u> <u>rotors(10 1. 10 2. 80 1. 80 2)</u> with <u>a</u> symmetric rotation [[axes]]<u>axis</u>, having <u>a</u> single sample separation <u>chamber disposed therein</u> <u>chambers (2, 15, 70)</u>, for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]] <u>placed in the sample separation chamber</u>, and <u>an</u> upper opening[[s]] <u>communicating with (3) passing through to said sample separation chambers in theat an upper part[[s]] <u>of the centrifugal rotor</u>, <u>said rotation axis included inside said separation chamber</u>;</u>

a members of frameworks capable of being coupled to selectively engaged with said upper openings (100); and

rotation-driving means [[(20)]] for rotating said centrifugal rotor[[s]] <u>around an axis</u> Z as said symmetric rotation axis, assuming that said symmetric rotation axis is Z, by rotating said [[members of frameworks]]<u>member</u> around said axis Z,

wherein provided that a direction normal to said axis Z and along which, in which the distance between the ends of said sample chamber [[is]] has the largest dimension thereof in the direction normal to said axis Z is the largest is defines an axis Y, and a direction intersecting with said axis Z and axis Y axis at right angles defines an [[is]] axis X, with respect to a cross sectional [[areas]] area of said sample separation chamber in a plane parallel to on a ZX plane is bigger than a parallel [[, said]] cross sectional area of said sample separation chamber [[far]] away from said ZX plane axis Z is smaller than said cross sectional area at a distance near axis Z.

- 9. (Currently Amended) A centrifugal separator according to claim 8, wherein said members of frameworks are is engaged with said upper opening[[s]] to seal said upper opening[[s]] with said member[[s]].
- 10. (Currently Amended) A centrifugal separator according to claim 8, wherein <u>said</u> sample solution[[s are]] <u>is</u> injected into said sample separation chamber[[s from]]<u>via</u> said upper opening[[s]].
- 11. (Currently Amended) A centrifugal separator according to claim 8, wherein said sample separation chamber[[s have]]has a concave portions with two symmetric planes intersecting with one another, including that includes said axis Z.
- 12. (Currently Amended) A centrifugal separator according to claim 8, wherein <u>a</u> portion[[s,]] to which the largest centrifugal acceleration generated by rotation of said centrifugal rotor[[s]] is applied[[,]] has the smallest <u>cross sectional</u> area[[s]].
- 13. (Currently Amended) A centrifugal separator according to claim 8, wherein <u>a</u> lower part[[s]] of said centrifugal rotor[[s have]] <u>has a</u> lower openings (16) <u>passing through to communicating with said sample separation chamber[[s]].</u>
- 14. (Currently Amended) A centrifugal separator according to claim 13, wherein the centrifugal rotors consist of the includes the upper part members of frameworks (110-1) and the lower part members of frameworks (110-1, 110-2, 110-3), and the upper members and the lower parts members of frameworks are fitted to each other one another.
- 15. (Currently Amended) A centrifugal separator comprising:
 - <u>a</u> centrifugal rotors (10-1, 10-2), with <u>a</u> symmetric rotation [[axes]] <u>axis</u>, having <u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in the <u>at an</u> upper part[[s]] <u>of the</u> <u>centrifugal rotor</u> and [[the]]<u>a</u> lower openings <u>passing through to communicating with</u> said

sample separation chamber[[s]], said symmetric rotation axis of said rotor included inside said separation chamber;

-- rotation driving-means [[(20)]] for rotating the centrifugal rotors, assuming that said symmetric rotation axes are rotation axes, by rotating said members of frameworks upper part around said rotation [[axes,]]axis; and

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] <u>and having a concave portions (13, 160)</u> for holding said sample solution[[s]] <u>injected into said sample separation chamber via [[from]]</u> the upper opening[[s]].

- 16. (Currently Amended) A centrifugal separator according to claim 15, wherein said centrifugal rotors consist of includes said upper part members of frameworks (110-2) and a lower part members of frameworks and said upper members and said lower members are which is fitted to said upper part one another.
- 17. (Currently Amended) A centrifugal separator comprising:

<u>a</u> centrifugal rotors (10-1, 10-2), with <u>a</u> symmetric rotation [[axes]] <u>axis</u>, having <u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in theat an upper part[[s]] of the <u>centrifugal rotor</u> and [[the]]<u>a</u> lower openings (16) passing through to <u>communicating with</u> said sample separation chamber[[s]], <u>said symmetric rotation axis of said rotor included inside said separation chamber</u>,

rotation driving means (20), assuming that said symmetric rotation axis is axis \mathbb{Z} , for rotating the centrifugal rotor[[s]] around [[said]] an axis \mathbb{Z} , and

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] <u>and</u> having a concave portions (13, 160) for holding said sample solution[[s]] <u>injected into said sample separation chamber via [[from]]</u> the upper opening[[s]],

wherein provided that a direction normal to said axis Z and along which, in which the distance between the ends of said sample chamber [[is]] has the largest dimension thereof defines an axis Y in the direction normal to said axis Z, and a [[the]] direction intersecting with said axis Z and axis Y at right angles defines an axis X, [[said]] and a longitudinal direction eorresponds toof the solution vessel coincides with said axis Y.

- 18. (Currently Amended) A centrifugal separator according to claim 17, wherein said centrifugal rotors consist of includes said upper part members of frameworks (110-2) and a lower part members of frameworks and said upper members and said lower members are which is fitted to said upper part one another.
- 19. (Currently Amended) A centrifugal separator comprising:

<u>a</u> centrifugal rotors (10-1, 10-2), with <u>a</u> symmetric rotation [[axes]] <u>axis</u>, having <u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in theat an upper part[[s]] of the <u>centrifugal rotor</u> and [[the]]<u>a</u> lower openings (16) passing through to <u>communicating with</u> said sample separation chamber[[s]], <u>said symmetric rotation axis of said rotor included inside said separation chamber;</u>

<u>a</u> members of frameworks capable of being coupled to <u>selectively engaged with</u> said upper openings (100);

rotation-driving means [[(20)]] for rotating said centrifugal rotor[[s]],assuming that the direction of said symmetric rotation axis is the first direction, by rotating by means of said members of frameworks around [[a]] said rotation axis in a [[said]] first direction[[,]]; and

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] and having a concave portions (13, 160) for holding said sample solution[[s]] injected <u>into said sample separation chamber via</u> [[from]] said upper opening, <u>both of the upper and lower openings communicating with said sample separation chamber</u>,

wherein provided that two directions intersecting each of a second direction and a third direction intersects with said first direction at a right angle are the second direction and the third direction, respectively, the length a dimension of said sample separation chamber in said third direction is larger than the length a dimension of said sample separation chamber in said second direction.

20. (Currently Amended) A centrifugal separator according to claim 19, wherein said members

of frameworks and said upper opening[[s]] are engaged with each other one another to seal said upper openings by said members of frameworks with said member.

21. (Cancelled)

22. (Currently Amended) A centrifugal separator according to claim 19, wherein the portions, a portion to which the largest centrifugal acceleration generated by

rotation of said centrifugal rotor[[s]] is applied[[,]] has the smallest <u>cross sectional</u> area[[s]].

- 23. (Currently Amended) A centrifugal separator according to claim 19, [[wherein]]<u>further comprising</u> means (17, 18, 130, 131) <u>for</u> rotatably <u>supports supporting</u> said centrifugal rotors <u>from lower side on a supporting stand</u>.
- 24. (Currently Amended) A centrifugal separator according to claim 19, wherein said centrifugal rotors consist of includes the upper part members of frameworks (110-2) and [[the]] a lower part members of frameworks (120-2), which is are fitted to the upper partone another.
- 25. (Currently Amended) A centrifugal separator comprising:

<u>a</u> centrifugal <u>rotor</u> <u>rotors(10-1. 10-2. 80-1. 80-2)</u> with <u>a</u> symmetric rotation [[axes]]<u>axis</u>, having <u>a</u> single sample separation <u>chamber disposed therein</u> <u>ehambers (2, 15, 70)</u>, for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]] <u>placed in the sample separation chamber</u>, and <u>an</u> upper opening[[s]] <u>communicating with (3) passing through to said sample separation chambers in theat an upper part[[s]] <u>of the centrifugal rotor</u>, <u>said rotation axis included inside said separation chamber</u>;</u>

<u>a</u> members of frameworks capable of being coupled to selectively engaged with said upper openings (100);

rotation-driving means [[(20)]] for rotating said centrifugal rotor[[s]] <u>around an axis</u> Z as said symmetric rotation axis, assuming that said symmetric rotation axis is Z, by rotating said [[members of frameworks]]<u>member</u> around said axis Z[[,]]; and

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] and having a concave portions (13, 160) for holding said sample solution[[s]] injected into

said sample separation chamber via [[from]] said upper opening, both of the upper and lower openings communicating with said sample separation chamber,

wherein provided that a direction normal to said axis Z and along which, in which the distance between the ends of said sample chamber [[is]] has the largest dimension thereof in the direction normal to said axis Z is the largest is defines an axis Y, and a direction intersecting with said axis Z and axis Y axis at right angles defines an [[is]] axis X, with respect to a cross sectional [[areas]] area of said sample separation chamber in a plane parallel to on a ZX plane is bigger than a parallel [[, said]] cross sectional area of said sample separation chamber [[far]] away from said ZX plane axis Z is smaller than said cross sectional area at a distance near axis Z.

- 26. (Currently Amended) A centrifugal separator according to claim 25, wherein said members of frameworks and said upper opening[[s]] are engaged with each other one another to seal said upper openings by said members of frameworks with said member.
- 27. (Currently Amended) A centrifugal separator according to claim 25, wherein said sample separation chambers have the <u>has a concave portion[[s]] fixed therein</u> with two symmetric planes and including the rotation symmetric axis therein.
- 28. (Currently Amended) A centrifugal separator according to claim 25, wherein the portions, a portion to which the largest centrifugal acceleration generated by rotation of said centrifugal rotor[[s]] is applied[[,]] has the smallest cross sectional area[[s]].
- (Currently Amended) A centrifugal separator according to claim 25, further comprising <u>for</u>
 rotatably <u>supports</u> <u>supporting</u> said centrifugal rotors <u>from lower side</u> <u>on a supporting stand</u>.
- 30. (Currently Amended) A centrifugal separator according to claim 25, wherein said centrifugal rotors consist of includes the upper part members of frameworks (110-2) and [[the]] a lower part members of frameworks (120-2), which is are fitted to the upper partone another.
- 31. (Currently Amended) A sample preparation device comprising:

a plurality of centrifugal rotors (210, 501) for centrifuging a sample contained in a sample solution, [[with]]each having a respective symmetric rotation [[axes]]axis, a single sample separation chambers(2, 15, 70) in them for centrifuging samples contained in sample solutions disposed therein, and an upper openings (3) communicated communicating with said sample separation chamber[[s]], said respective rotation symmetric axis being included inside said sample separation chamber;

multiplea plurality of rotation driving means (211, 502) assuming that said symmetric rotation axes are rotation axes each for rotating a respective one of said centrifugal rotors around said respective symmetric rotation axis;[[,]] and

[[a]]control means for independently driving said rotation driving means of said respective rotor, independently.

- 32. (Currently Amended) A sample preparation device according to claim 31, wherein said control means control both injection of said sample solution[[s]] into said sample separation chamber[[s]] of <u>each of said centrifugal rotors</u>, and recovery of said sample[[s]] from <u>each of said sample separation chamber[[s]] of each of said centrifugal rotors</u> for each of said centrifugal rotors.
- 33. (Currently Amended) A centrifugal preparation device according to claim 31, wherein <u>each</u> of said centrifugal rotors [[are]]is disposed [[at]]on a transport devices (40, 201) moving [[on]]along a loop trajectory [[trajectories]].
- 34. (Currently Amended) A sample preparation device according to claim 31, wherein <u>each of</u> said centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (-40, 201)</u> moving [[on]]<u>along a loop trajectory trajectories and at given intervals, where said transport devices move, and each of said centrifugal rotors [[are]]<u>is</u> rotated for [[centrifuging]]<u>a given time interval to carry out centrifugal separation of said sample solution[[s]] contained therein.</u></u>
- 35. (Currently Amended) A sample preparation device according to claim 31, <u>each of said</u> centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (40, 201)</u> moving [[on]]<u>along a circular trajectory</u> [[trajectories]].

- 36. (Currently Amended) A sample preparation device according to claim 31, wherein <u>each of</u> said centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (40, 201)</u> moving [[on]]<u>along a circular trajectory trajectories and at given intervals, where said transport devices move, and each of said centrifugal rotors [[are]]<u>is</u> rotated for [[centrifuging]]<u>a given time interval to carry out centrifugal separation of said sample solution[[s]] contained therein.</u></u>
- 37. (Currently Amended) A sample preparation device comprising:

a plurality of centrifugal rotors (210, 501) for centrifuging a sample contained in a sample solution, [[with]]each having a respective symmetric rotation [[axes]]axis, a single sample separation chambers(15, 70) in them for centrifuging samples contained in sample solutions disposed therein, and an upper openings (3) communicated communicating with said sample separation chamber[[s]] at an upper part of each rotor, in the upper parts and [[the]] a lower openings passing through to (16) communicating with said sample separation chamber[[s,]] at a lower part of each rotor, said respective rotation symmetric axis being included inside said sample separation chamber;

<u>a plurality of solution vessels (12, 150) each being fixed said sample separation chamber and having a concave portions (13, 160)</u> for holding said sample solution[[s]] injected <u>into said sample separation chamber via[from]</u> said upper opening[[s,]];

multiplea plurality of rotation driving means (211, 502) assuming that said symmetric rotation axes are rotation axes each for rotating a respective one of said centrifugal rotors around said respective symmetric rotation axis;[[,]] and

[[a]]control means for driving said [[multiple]]rotation driving means, whereby said rotors are driven independently from each other.

- 38. (Currently Amended) A sample preparation device according to claim 37, wherein said control means control both injection of said sample solution[[s]] into said sample separation chamber[[s]] of each of said centrifugal rotors, and recovery of said sample[[s]] from each of said sample separation chamber[[s]] of each of said centrifugal rotors for each of said centrifugal rotors.
- 39. (Currently Amended) A centrifugal preparation device according to claim 37, wherein each

of said centrifugal rotors [[are]] is disposed [[at]] on a transport devices (40, 201) moving [[on]] along a loop trajectory [[trajectories]].

- 40. (Currently Amended) A sample preparation device according to claim 37, wherein <u>each of</u> said centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (40, 201)</u> moving [[on]]<u>along a loop trajectory trajectories and at given intervals, where said transport devices move, and each of said centrifugal rotors [[are]]<u>is</u> rotated for [[centrifuging]]<u>a given time interval to carry out centrifugal separation of said sample solution[[s]] contained therein.</u></u>
- 41. (Currently Amended) A sample preparation device according to claim 37, <u>each of said</u> centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (40, 201)</u> moving [[on]]<u>along a circular trajectory</u> [[trajectories]].
- 42. (Currently Amended) A sample preparation device according to claim 37, wherein <u>each of</u> said centrifugal rotors [[are]]<u>is</u> disposed [[at]]<u>on a transport devices (40, 201)</u> moving [[on]]<u>along a circular trajectory trajectories and at given intervals, where said transport devices move, and each of said centrifugal rotors [[are]]<u>is</u> rotated for [[centrifuging]]<u>a given time interval to carry out centrifugal separation of said sample solution[[s]] contained therein.</u></u>
- 43. (Currently Amended) A sample preparation method for preparing at least one sample with a plurality of multiple centrifugal rotors (210, 501) with symmetric rotation axes for the rotations, each having a single sample separation chambers (2, 15, 70) in them therein for centrifuging a sample[[s]] contained in [[the]] a sample solution[[s]], an upper openings passing through to communicating with said sample separation chamber[[s]], each of said rotors having a respective symmetric rotation axis included inside said sample separation chamber, said method comprising: [[;]]
 - (1) a process for injecting said sample solution[[s]] into said sample separation chamber[[s]] of each of said centrifugal rotors[[,]];
 - (2) a process for moving <u>each of said centrifugal rotors [[on]]along a loop-shape</u> trajectory[[,]];
 - (3) a process for centrifuging said sample solutions, assuming that said symmetric

rotation axes are the rotation axes, by rotating said centrifugal rotors independently around each of said respective symmetric rotation axis: [[axes,]] and

- (4) a process for recovering said sample[[s]] obtained by centrifugation from <u>each of</u>said sample separation chambers of said centrifugal rotors.
- 44. (Currently Amended) A sample preparation method for preparing at least one sample with a plurality of multiple centrifugal rotors (210, 501) with symmetric rotation axes for the rotations, each having a single sample separation chambers (2, 15, 70) in them therein for centrifuging a sample[[s]] contained in [[the]] a sample solution[[s]], an upper openings passing through to communicating with said sample separation chamber[[s]], each of said rotors having a respective symmetric rotation axis included inside said sample separation chamber, said method comprising: [[;]]
 - (1) a process for injecting said sample solution[[s]] into said sample separation chamber[[s]] of each of said centrifugal rotors[[,]];
 - (2) a process for moving each of said centrifugal rotors [[on]]along a loop-shape trajectory[[,]];
 - (3) a process for centrifuging said sample solution[[s]] to produce [[said]] a precipitate[[s]] of said sample assuming that said symmetric rotation axes are the rotation axes, by independently rotating each of said centrifugal rotors around said respective symmetric rotation axis; axes, independently
 - (4) a process for discharging [[the]]a supernatant liquid obtained by centrifugation [[from]]of said sample solution in said sample separation chamber of each of said centrifugal rotors;[[,]]
 - (5) a process for cleaning away said residual precipitate[[s]] deposited in said sample separation chamber of each of said centrifugal rotors;[[,]]
 - (6) a process for injecting <u>a</u> solvent[[s]] into <u>at least one of</u> said sample separation chambers of said centrifugal rotors, rotating independently said centrifugal rotors, and <u>thereby</u> dissolving said precipitate[[s into]]<u>in</u> said solvent; dissolving said precipitate in said solvent, and
 - (7) a process for recovering said the solvent containing said dissolved precipitates precipitate dissolved in said solvent from each of said sample separation chambers of said centrifugal rotors into [[the]] at least one recovery vessel[[s]].

- (Currently Amended) A sample preparation method for preparing at least one sample with a plurality of multiple centrifugal rotors (210, 501) with symmetric rotation axes for the rotations, each having a single sample separation chambers (2, 15, 70) in them therein for centrifuging a sample[[s]] contained in [[the]] a sample solution[[s]], an upper openings passing through to communicating with said sample separation chamber[[s]] at an upper part of a respective centrifugal rotor, and [[the]]a lower openings passing through to communicating with said sample separation chamber[[s]] at a lower part of a respective centrifugal rotor, each of said rotors having a respective symmetric rotation axis included inside said sample separation chamber, said method comprising:[[;]]
 - (1) a process for injecting said sample solution[[s]] into at least one of solution holding vessels (12, 150) fixed in said sample separation chambers of said centrifugal rotors, each having a concave portions (13, 160) in said sample separation chambers of said centrifugal rotors,
 - (2) a process for moving each of said centrifugal rotors [[on]]along [[the]]a loop-shape trajectory;[[,]]
 - (3) a process for centrifuging said sample solutions, assuming that said symmetric rotation axes, by rotating each of said centrifugal rotors independently [[,]] around said respective rotation symmetric [[axes,]]axis; and
 - (4) a process for recovering said sample[[s]] obtained by centrifugation from each of said sample separation chambers of said centrifugal rotors.
- 46. (Currently Amended) A sample preparation method for preparing at least one sample with a plurality of multiple centrifugal rotors (210, 501) with symmetric rotation axes for the rotations, each having a single sample separation chambers (2, 15, 70) in them therein for centrifuging a sample[[s]] contained in [[the]] a sample solution[[s]], an upper openings passing through to communicating with said sample separation chamber[[s]] at a lower part of a respective centrifugal rotor, each of said rotors having a respective symmetric rotation axis included inside said sample separation chamber, said method comprising:[[;]]
 - (1) a process for injecting said sample solution[[s]] into at least one of solution holding vessels (12, 150) fixed in said sample separation chambers of said centrifugal rotors, each having a concave portions (13, 160) in said sample separation chambers of said

centrifugal rotors,;

- (2) a process for moving each of said centrifugal rotors [[on]] along a loop-shape trajectory[[,]];_______
- (3) a process for centrifuging said sample solution[[s]] to produce [[said]] a precipitate[[s]] of said sample assuming that said symmetric rotation axes are the rotation axes, by independently rotating each of said centrifugal rotors around said respective symmetric rotation axis; axes, independently
- (4) a process for discharging [[the]]a supernatant liquid obtained by centrifugation [[from]]of said sample solution in said sample separation chamber of each of said centrifugal rotors;[[,]]
- (5) a process for cleaning away said residual precipitate[[s]] deposited in said sample separation chamber of each of said centrifugal rotors;[[,]]
- (6) a process for injecting <u>a</u> solvent[[s]] into <u>at least one of</u> said sample separation chambers of said centrifugal rotors, rotating independently said centrifugal rotors, and <u>thereby</u> dissolving said precipitate[[s into]]<u>in</u> said solvent;, <u>dissolving said precipitate in said solvent</u>, and
- (7) a process for recovering said the solvent containing said dissolved precipitates precipitate dissolved in said solvent from each of said sample separation chambers of said centrifugal rotors into [[the]] at least one recovery vessel[[s]].
- 47. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal rotor comprising:
 - <u>a</u> single sample separation chambers in them(2, 15, 70) disposed therein for centrifuging [[the]] <u>a</u> sample[[s]] contained in[[the]] <u>a</u> sample solution[[s,]] and <u>having an</u> [[the]] upper openings passing through to(3) communicated with said sample separation chamber[[s]], and a symmetric rotation axis included inside said sample separation chamber,

wherein assuming that the a direction of said symmetric rotation axis is the defines a first direction, and two-directions intersecting each of a second direction and a third direction intersects with said first direction at a right angle are the second direction and the third direction, respectively, the length a dimension of said sample separation chamber in said third direction is larger than the length a dimension of said sample separation chamber in said second direction.

48. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal rotor comprising:

<u>a</u> single sample separation chambers in them(2, 15, 70) disposed therein for centrifuging [[the]] <u>a</u> sample[[s]] contained in[[the]] <u>a</u> sample solution[[s,]] and <u>having an</u> [[the]] upper openings passing through to(3) communicated with said sample separation chamber[[s]], and a symmetric rotation axis included inside said sample separation chamber,

wherein provided that a direction normal to said axis Z and along which, in which the distance between the ends of said sample chamber [[is]] has the largest dimension thereof in the direction normal to said axis Z is the largest is defines an axis Y, and a direction intersecting with said axis Z and axis Y axis at right angles defines an [[is]] axis X, with respect to a cross sectional [[areas]] area of said sample separation chamber in a plane parallel to on a ZX plane is bigger than a parallel [[, said]] cross sectional area of said sample separation chamber [[far]] away from said ZX plane axis Z is smaller than said cross sectional area at a distance near axis Z.

49. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal rotor comprising:

<u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in the <u>at an</u> upper part[[s]] <u>of the centrifugal rotor</u> and [[the]]<u>a</u> lower openings (16) passing through to <u>communicating with</u> said sample separation chamber[[s]], <u>said symmetric rotation axis of</u> said rotor included inside said separation chamber; and

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] <u>and</u> having a concave portions (13, 160) for holding said sample solution[[s]] injected <u>into</u> <u>said sample separation chamber via</u> [[from]] said upper opening[[s]].

50. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal rotor comprising:

<u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3)

passing through to communicating with said sample separation chambers in theat an upper part[[s]] of the centrifugal rotor and [[the]]a lower openings (16) passing through to communicating with said sample separation chamber[[s]], said symmetric rotation axis of said rotor is defined as an Z axis and included inside said separation chamber; and

a_solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] and having a concave portions (13, 160) for holding said sample solution[[s]] injected into said sample separation chamber via [[from]] said upper opening[[s]],

wherein assuming that the a direction normal to said axis Z and along which, in which the distance between the ends of said sample chamber [[is]] has the largest dimension thereof in the direction normal to said axis Z is the largest is defines an axis Y, and [[the]]a direction intersecting with said axis Z and said axis Y at right angles defines an [[is]] axis X, respectively, the longitudinal direction of said sample separation vessel corresponds to coincides with axis Y.

51. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal rotor comprising:

<u>a</u> single sample separation chambers (15, 70) in them, <u>disposed therein</u> for centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in theat an upper part[[s]] of the centrifugal rotor and [[the]]<u>a</u> lower openings (16) passing through to <u>communicating with</u> said sample separation chamber[[s]], <u>said symmetric rotation axis of said rotor is defined as an first direction and included inside said separation chamber; and</u>

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] <u>and</u> having a concave portions (13, 160) for holding said sample solution[[s]] injected <u>into</u> <u>said sample separation chamber via</u> [[from]] said upper opening[[s]],

wherein assuming that two directions that each of a second direction and a third direction intersects with the first direction at a right angle are the second direction(X) and the third direction (Y), respectively, a length dimension in the third direction of the sample separation chamber is larger than [[that]] a dimension of said sample separation chamber in the second direction.

52. (Currently Amended) Centrifugal rotors with symmetric rotation axes having A centrifugal

rotor comprising:

<u>a</u> single sample separation [[chambers in them]]chamber, <u>disposed therein</u>, for <u>a</u> single sample_separation_chambers (15, 70) in them, <u>disposed therein</u>-for-centrifuging <u>a</u> sample[[s]] contained in <u>a</u> sample solution[[s]], [[the]]<u>an</u> upper openings (3) passing through to <u>communicating with</u> said sample separation chambers in the <u>at an</u> upper part[[s]] <u>of the centrifugal rotor</u> and [[the]]<u>a</u> lower openings (16) passing through to <u>communicating with</u> said sample separation chamber[[s]], <u>said symmetric rotation axis of said rotor is defined as an Z axis and included inside said separation chamber; and</u>

<u>a</u> solution holding vessels (12, 150), fixed in said sample separation chamber[[s,]] <u>and</u> having a concave portions (13, 160) for holding said sample solution[[s]] injected <u>into</u> said sample separation chamber via [[from]] said upper opening[[s]],

wherein both of the upper and lower openings communicate with the sample separation chamber,

wherein provided that a direction normal to said axis Z and along which a distance between the ends of said sample separation chamber has in a direction normal to axis Z is the largest dimension thereof defines an [[is]] axis Y, and a direction intersecting axis Z and axis Y at right angles defines an [[is]] axis X, with respect to a cross sectional [[areas]] area of said sample separation chamber in a plane parallel to on a ZX plane is bigger than a parallel [[, said]] cross sectional area of said sample separation chamber [[far]] away from said ZX plane axis Z is smaller than said cross sectional area at a distance near axis Z.